

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-4 (cancelled)

Claim 5 (new): A fuel cell system having a fuel cell, which uses a proton conductive solid polymer electrolyte, and a secondary battery as a backup supply, the system comprising:

 a fuel cassette which is detachably attachable to the fuel cell;

 means for monitoring an output of the fuel cell and, when the output of the fuel cell decreases and becomes less than or equal to a predetermined value, connecting a load to the secondary battery; and

 means for monitoring a remaining capacity of the secondary battery and, when the remaining capacity decreases and becomes less than or equal to a predetermined value, warning that the fuel cell is running out of fuel.

Claim 6 (new): The fuel cell system of claim 5, further comprising:

 means for monitoring the output of the fuel cell and, when the output of the fuel cell decreases and becomes less than or equal to a predetermined value, disconnecting the load from the fuel cell and connecting the load to the secondary battery;

 detecting means for detecting a decrease in the output of the fuel cell; and

 means for indicating a warning signal showing that the fuel cell is running out of fuel when the detecting means has detected the decrease in the output of the fuel cell.

Claim 7 (new): The fuel cell system of claim 5, further comprising means for warning that the fuel cell is running out of fuel when the remaining capacity of the secondary battery decreases and becomes less than or equal to a first level at which the load is capable of being operated for more than or equal to a predetermined period of time.

Claim 8 (new): The fuel cell system of claim 7, further comprising means for disconnecting the load from the secondary battery when the remaining capacity of the secondary battery decreases and becomes less than the first level and becomes less than or equal to a second level at which the fuel cell is capable of being restarted.

Claim 9 (new): The fuel cell system of claim 6, further comprising means for warning that the fuel cell is running out of fuel when the remaining capacity of the secondary battery decreases and becomes less than or equal to a first level at which the load is capable of being operated for more than or equal to a predetermined period of time.

Claim 10 (new): The fuel cell system of claim 9, further comprising means for disconnecting the load from the secondary battery when the remaining capacity of the secondary battery decreases and becomes lower than the first level and becomes less than or equal to a second level at which the fuel cell is capable of being restarted.

Claim 11 (new): A method for detecting running out of fuel in a fuel cell system having a fuel cell, which uses a proton conductive solid polymer electrolyte, and a secondary battery as a backup supply, comprising the steps of:

supplying a fuel from a fuel cassette which is detachably attachable to the fuel cell;

monitoring an output of the fuel cell without using a fuel sensor and, when the output of the fuel cell decreases and becomes less than or equal to a predetermined value, connecting a load to the secondary battery; and

warning that the fuel cell is running out of fuel when a remaining capacity of the second battery decreases and becomes less than or equal to a predetermined value.

Claim 12 (new): The method for detecting running out of fuel in the fuel cell system of claim 11, further comprising the steps of:

monitoring the output of the fuel cell and, when the output of the fuel cell decreases and becomes less than or equal to a predetermined value, disconnecting the load from the fuel cell and connecting the load to the secondary battery;

detecting a decrease in the output of the fuel cell; and
indicating a warning signal showing that the fuel cell is running out of fuel
when the decrease in the output of the fuel cell has been detected.

Claim 13 (new): The method for detecting running out of fuel in the fuel
cell system of claim 12, further comprising the step of warning that the fuel cell is running
out of fuel when the remaining capacity of the secondary battery decreases and becomes less
than or equal to a first level at which the load is capable of being operated for more than or
equal to a predetermined period of time.

Claim 14 (new): The method for detecting running out of fuel in the fuel
cell system of claim 13, further comprising the step of disconnecting the load from the
secondary battery when the remaining capacity of the secondary battery decreases and
becomes less than the first level and becomes less than or equal to a second level at which the
fuel cell is capable of being restarted.